

## **ABSTRACT**

According to the invention, input MPEG data packets are delivered to appropriate stream buffers from asynchronous program sources. The MPEG data packets have different transmission speeds with defined time stamps of their packets, while the packets of input MPEG streams are multiplexed and have their time stamps corrected in such a way that their assigned time stamps are deleted and replaced by values of time markers calculated according to the algorithm detecting and correcting the detected synchronization errors, after which the packets with so corrected time stamps are appended appropriately to the output MPEG stream. The essence of the invention is based in that packets of each input MPEG stream are transferred from stream buffers to appropriate packet buffers together with information about the time ratios between the neighboring packets of a given MPEG input stream. After that, input packets of MPEG streams are retrieved from the mentioned packet buffers by means of a multiplexer to the packet converter. In the packet converter there is a check of the time ratios between the neighboring packets of input streams, the state of the clock of a given output stream, the time of sending the last packet from the given packet buffer and the allowed time offset of packets in the output stream and on their basis the time markers, included in them, are corrected according to the value of the clock of MPEG output stream. Next, selected packets are appended adequately to the MPEG output stream.